

CLAIMS

What is claimed is:

1. An electronic apparatus comprising:

a housing;

an electrical connector connected to the housing;

a printed circuit board removably connectable to the electrical connector;

a tray having the printed circuit board connected thereto, the tray having at least one slide mounting tab and a flange;

at least one slide having a first member connected to the tray by a float connection comprising the at least one tab and a fastener extending through the flange to allow a float movement between the first member and the tray, and a second member connected to the housing and movably connected to the first member,

wherein the at least one slide allows the tray to move relative to the housing to connect and disconnect the printed circuit board with the connector, and wherein the float connection allows the tray to move to allow the printed circuit board to align with the electrical connector when being connected thereto.

2. An electronic apparatus as in claim 1 further comprising a power backplane having the electrical connector connected thereto, and wherein the printed circuit board comprises a mating electrical connector.

3. An electronic apparatus as in claim 1 wherein the electronic apparatus comprises two of the slides located parallel to each other, each slide providing a telescoping movement of the first and second members of the slides relative to each other.

4. An electronic apparatus as in claim 1 wherein the mounting tab extends downward from a bottom side of the tray and has a general L shape.
5. A system for movably connecting a printed circuit board to a frame, the system comprising:
- a tray having the printed circuit board connected thereto;
 - at least one slide mechanism with at least two rails connected to each other for telescoping relative movement;
 - a floating connection between the at least one slide and the tray to allow the tray to move relative to the at least one slide mechanism.
6. A system as in claim 5 further comprising means for sliding the tray relative to a portion of the frame in a first direction, the means for sliding including the at least one slide mechanism.
7. A system as in claim 5 further comprising means for allowing the tray to move relative to the frame in a second direction angled relative to the first direction, the means for allowing the tray to move relative to the frame comprising the floating connection between the at least one slide and the tray.
8. A system as in claim 7 wherein the float connection is adapted to allow the tray to move relative to the frame in a third direction angled relative to the first and second directions.
9. A system as in claim 5 wherein the at least one slide mechanism includes two of the slide mechanisms.
10. A system as in claim 5 wherein the at least one slide mechanism comprises bearings located between the at least two rails.

11. A system as in claim 5 wherein the at least one slide mechanism comprises three of the rails.

12. A system as in claim 5 wherein the float connection comprises a tab extending from the tray and located beneath a first one of the rails, and a fastener attached to the tray and located beneath the first rail.

13. A system for connecting a first electrical connector on a printed circuit card with a second electrical connector, the system comprising:

a support member having the printed circuit board connected thereto;

a movement device allowing the support member to move in a first direction relative to the second connector; and

a float connection between the movement device and the support member allowing the support member to move in a second direction relative to the second connector, wherein the second direction is angled relative to the first direction, and wherein the float connection allows the first connector to align with the second connector as the support member is moved in the first direction and the first and second connectors are being connected to each other.

14. A system as in claim 13 wherein the support member comprises a tray having the printed circuit board mounted to a top side of the tray.

15. A system as in claim 13 wherein the movement device comprises at least one slide, the slide comprising a first member movably connected to a second member in a general telescoping arrangement.

16. A system as in claim 13 wherein the float connection comprises a tab extending from the support member and a fastener attached to the support member, and wherein a first

member of the movement device has opposite ends which are loosely captured between the fastener and tab and the support member.

17. A system as in claim 16 wherein the movement device comprises the first member having an upward extending bottom channel at rear and front portions of the first member, and wherein the mounting tab and the fastener are located in the bottom channel.

18. An electronic apparatus comprising:

- a housing;

- a printed circuit card having a first electrical connector;

- a second electrical connector connected to the housing, the second electrical connector being adapted to make it the first electrical connector; and

- a system for connecting the first electrical connector on the printed circuit board with the second electrical connector **as in claim 17.**

19. An electronic apparatus as in claim 18 wherein the float connection comprises a tab extending from the support member and a fastener attached to the support member, and wherein a first member of the movement device has opposite ends which are loosely captured between the fastener and tab and the support member.

20. An electronic apparatus as in claim 19 wherein the movement device comprises the first member having an upward extending bottom channel at rear and front portions of the first member, and wherein the mounting tab and the fastener are located in the bottom channel.